

Innovation – The 3rd Pillar at UCD

**Professor J. Peter Clinch
UCD Vice-President for Innovation**

EUV Source Workshop

9 November 2011



Innovation

Building Ireland's Smart Economy

- ◆ Medium-Term economic framework published by the Irish Government in December 2008
- ◆ Focus on productivity growth through 5 pillars as the basis for sustainable high-quality jobs and wage levels
- ◆ Sets out an ambitious plan to reorganise the Irish economy over the period to 2014
- ◆ Aims to build a smart economy with a thriving enterprise sector, high-quality employment, secure energy supplies, an attractive environment and first-class infrastructure
- ◆ The smart economy has at its core an exemplary research, innovation and commercialisation ecosystem
- ◆ Key goal - to build the innovation component of the economy by using human capital (knowledge, skills, creativity) to translate ideas into value processes, products and services



Innovation

Innovation Ecosystem Ireland in 2020

- ◆ By 2020 Ireland will have a significant number of large, world leading, innovation intensive companies
 - Global footprint
 - Many Irish headquartered and Irish owned
- ◆ Such companies will
 - Be ambitious and innovative
 - Vary in scale
 - Provide high-quality employment
 - Export-focused



Innovation

Innovation Ecosystem - Six Principles

- ◆ Six principles are fundamental to transforming Ireland into an international innovation hub
 1. The entrepreneur and enterprise must be at the centre of our efforts
 2. Establishing, attractive, growing and transforming enterprises must be the focus of a coherent national effort
 3. Availability of smart capital is crucial for starting, growing and transforming enterprises
 4. An education system which fosters independent thinking, creativity and innovation is vital to achieving the Smart Economy
 5. State to actively accelerate success by encouraging flagship projects and prioritise the provision of excellent infrastructure
 6. Sharpen the focus of our national research system to target areas of potential strategic and economic advantage for Ireland



Innovation

UCD Vision

- ◆ *Vision* of University College Dublin is to be a
 - Leading international, research-intensive University where excellence in teaching goes together with a commitment to research, scholarship, creativity and innovation
 - University where innovation sits alongside education and research as the third, equally significant pillar of activity
 - A University committed to increasing levels of collaboration and partnership with Irish and international peers, government and industry



Innovation

UCD Innovation Strategy

- ◆ UCD's innovation strategy has three core objectives
 - Maximise the impact of UCD's knowledge and expertise
 - Step change increase in the commercialisation outputs from UCD's research base
 - Foster innovation and entrepreneurship at 3rd and 4th levels
 - Create the business leaders and educated workforce to create the knowledge economy
 - Foster and reward innovation amongst UCD staff
- ◆ Work in partnership with Trinity College Dublin as part of the TCD-UCD Innovation Alliance.



Innovation

NovaUCD

- ◆ NovaUCD, the Innovation and Technology Transfer Centre, is the hub of innovation and knowledge transfer activities at UCD
- ◆ Leading innovation and technology transfer centre in Ireland
- ◆ NovaUCD is a purpose-built centre which offers a supportive environment and incubation facilities to assist innovators and entrepreneurs in taking their ideas from proof of principle to full commercial success
- ◆ NovaUCD's vision is to be an international leader in the commercialisation of research and knowledge-intensive activity for the benefit of society and the economy



Innovation

Key Results (2004 – to date)

- ◆ UCD spin-out ChangingWorlds acquired for \$60 million plus deferred consideration. Recently Biancamed acquired for an undisclosed sum
- ◆ Over €3.6 million generated from commercialisation of research
- ◆ Over 20 new UCD spin-outs incorporated
- ◆ Over 350 inventions disclosed
- ◆ Over 200 patent applications filed which includes over 110 priority patents
- ◆ Over 70 licence agreements with Irish and international companies
- ◆ Over 60 high-tech and knowledge-intensive companies have availed of NovaUCD's support and occupied NovaUCD incubation space

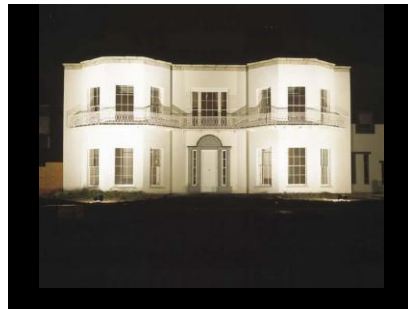


Innovation

Integrated Support Programme

NovaUCD's support for innovation and knowledge transfer activities at UCD is built around 4 key areas:

- ♦ Managing technology transfer
- ♦ Incubating and supporting new high-tech ventures
- ♦ Building partnerships
- ♦ Promoting a culture of innovation and entrepreneurship



Innovation

Technology Transfer



- ◆ NovaUCD's key technology transfer activities are
 - ◆ Identifying intellectual property (IP) arising from UCD research programmes
 - ◆ Protecting the IP as appropriate
 - ◆ Commercialising the IP

- ◆ Key steps in NovaUCD's commercialisation process
 - ◆ Review and assessment of invention
 - ◆ Protecting the invention
 - ◆ Development of a commercialisation strategy
 - ◆ Marketing the invention
 - ◆ Licensing the invention or
 - ◆ Creating a spin-out company e.g. NewLambda Technologies



Innovation

Support for New Ventures

- ◆ NovaUCD Campus Company Development Programme established in 1996
- ◆ Assists UCD academic and research entrepreneurs in defining, developing and transforming innovative ideas into sound and commercially feasible new ventures and preparing a detail business plan
- ◆ Nine-month part-time programme includes workshops, mentoring and one-to-one consultancy
- ◆ **Impact:** 170 new ventures & 260 individuals completed programme since 1996
- ◆ 15 new ventures commercialising UCD research outputs taking part in the 2011 Programme



Innovation

NovaUCD Facilities

- ◆ State-of-the-art facility to support the development of a community of entrepreneurs
- ◆ Access to internet facilities, UCD network, desk space, coffee shop, seminar and meeting rooms, secretarial and reception services
- ◆ NovaUCD facility
 - ◆ 4,000 sq.m. in size
 - ◆ Over 50 incubation units or business office
 - ◆ 8 'wet labs' for life sciences companies
 - ◆ 14 desk spaces for early-stage entrepreneurs
 - ◆ Seminar, meeting rooms, boardroom, café
 - ◆ 39 high-tech and knowledge-intensive currently at NovaUCD
 - ◆ Employing over 200 staff
 - ◆ New 8000 sq.m. facility acquired for larger companies and partnerships with industry.



Innovation

Incubation Unit Companies (INCL)



Innovation

Strategic Partnerships

- ◆ Bridging the gap between research and industry and building relationships is a key element of UCD's commercialisation strategy
- ◆ NovaUCD is a point of contact for companies seeking partners for collaborative research and advice on licensing and other commercial opportunities
- ◆ NovaUCD provides IP advice/negotiation for partnership projects
- ◆ Collaborative research contracts negotiated by NovaUCD



Innovation

Fostering Innovation and Entrepreneurship at 3rd and 4th Levels

◆ Innovation Academy at UCD

- Entrepreneurial education for PhD students
- Collaboration between UCD, TCD and QUB
- Funded under PRTL15
- Graduate Certificate in Innovation and Entrepreneurship (modular)
- Opened November 2010 (80 students in year 1, 180 students in year 2)



◆ NovaUCD 'Entrepreneurs Live!' seminars

- The aim is to promote a spirit of entrepreneurship across the University campus especially amongst undergraduate and postgraduate students
- Involves well-known entrepreneurs who share their experiences of setting up and running their own businesses
- > 80 seminars in total held since 2003



Innovation

Foster and Reward Innovation Amongst UCD Staff

- ◆ Inclusion of innovation as a criterion for promotion
- ◆ Build an innovation track record into UCD recruitment criteria, where appropriate
- ◆ NovaUCD Innovation Award
 - ◆ Presented annually since 2004 in recognition of excellence in innovation or of success achieved in the commercialisation of UCD research or other intellectual activity



Innovation

Professor J. Peter Clinch Vice-President for Innovation

T: +353 1 716 3737

E: vpinnovation@ucd.ie

W: www.ucd.ie/innovation



Innovation